Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Withdrawn) A biomolecule bead-containing tube containing a biomolecule bead array in which biomolecule beads consisting of a spherical bead and a specific biomolecule species immobilized thereon are arranged in a tubular container made of a material transmitting a light having a specific wavelength, wherein a spherical mark bead made of a material optically distinguishable from the material constituting the spherical bead of said biomolecule bead is inserted in a predetermined order between specific biomolecule beads in the biomolecule bead array, wherein said biomolecule bead-containing tube has a first region where a number of the biomolecule beads is larger than a number of the mark beads, and a second region where a number of the mark beads is larger than a number of the biomolecule beads, wherein the second region is provided in a terminal section selected from a start section or an end section for reading-out beads in the biomolecule bead array in the first region.

2. (Withdrawn) A biomolecule bead-containing tube according to claim 1, wherein the mark beads are arranged corresponding to an identification code indicating attribution information selected from a manufacturer's name, an ID number and sequence pattern information for the biomolecule bead array.

3. (Cancelled)

4. (Withdrawn) A biomolecule bead-containing tube according to claim 1, wherein at least the mark beads are arranged in the second region corresponding to an identification code indicating attribution information selected from a manufacturer's name, an ID number and sequence pattern information for the biomolecule bead array.

5. (Cancelled)

6. (Withdrawn) A biomolecule bead-containing tube according to claim 1, wherein the mark beads are arranged in the first region corresponding to an identification code

indicating attribution information selected from a manufacturer's name, an ID number and sequence pattern information for the biomolecule bead array.

7. - 18. (Cancelled)

19. (Currently Amended) A system including:

a biomolecule bead-containing tube comprising a biomolecule bead array in which biomolecule beads comprising a spherical bead having a specific biomolecule type immobilized thereon, and marker beads comprising a light absorbing material are arranged in a tubular container made of a material configured to transmit light having a specific wavelength,

~~wherein~~ a device for determining the arrangement of the biomolecule beads and the marker beads which are in a predetermined order within the biomolecule bead array,

wherein an arrangement of a set of biomolecule beads and marker beads corresponds to a specimen in the tube,

wherein another arrangement of another set of biomolecule beads and marker beads corresponds to identification information which identifies the tube, and biomolecule attribution information which identifies a type of biomolecule beads~~of a specimen~~; and

a storage device for storing a code corresponding to the ~~arrangement of the biomolecule beads and the marker beads to~~ tube identification information~~identify the biomolecule bead-containing tube~~.

20. (Cancelled)

21. (Currently Amended) A method for analyzing a specimen comprising the steps of:

arranging in a bead-containing tube, biomolecule beads having a specific biomolecule type immobilized thereon and marker beads comprising a light absorbing material, in a predetermined order corresponding to tube identification information which identifies the tube ~~of~~containing the specimen;

storing the tube identification information in a memory; and

analyzing the specimen by irradiating the bead-containing tube with a light to read out an emitted light from the biomolecule beads in the bead-containing tube so as to optically read out the tube identification information and identify the tube containing the specimen.

22. (Previously Presented) The method of claim 21, wherein storing tube identification information in memory comprises storing a code for identification of each bead-containing tube.

23. (Previously Presented) The method of claim 21, wherein storing tube identification information in memory comprises storing data associated with information for identifying an organism or test subject.

24. (Previously Presented) The method of claim 21 further comprising the step of comparing optically read out tube identification information with a database of tube identification information to identify the specimen.